

**To:** Jonsson, Jonas (ARC-TI)[SGT, INC][jonas.jonsson@nasa.gov]; Chirayath, Ved (ARC-SGE)[ved.chirayath@nasa.gov]  
**Cc:** Aurell, Johanna[Aurell.Johanna@epa.gov]  
**From:** Gullett, Brian  
**Sent:** Tue 6/13/2017 10:41:47 AM  
**Subject:** RE: Radford and McAlester figures

Jonas,

Welcome back! Sounds like a wonderful adventure up north!

Slide 2 looks great. If you can repeat that for Radford, we're good. Tack sa myket!

Brian

**From:** Jonsson, Jonas (ARC-TI)[SGT, INC] [mailto:jonas.jonsson@nasa.gov]  
**Sent:** Monday, June 12, 2017 9:57 PM  
**To:** Gullett, Brian <Gullett.Brian@epa.gov>; Chirayath, Ved (ARC-SGE) <ved.chirayath@nasa.gov>  
**Cc:** Aurell, Johanna <Aurell.Johanna@epa.gov>  
**Subject:** Re: Radford and McAlester figures

Hi all,

I am back from the Viking land's "cold coast" (Svalbard) and have had a great time with no sunsets for about 2 weeks time. We made it up to over 80 deg lat before hitting impenetrable pack ice. Had close encounters with most of the larger animals one could wish for, including polar bears and walruses, and enjoyed several scuba dives in the snug, 32 F, arctic waters. I even got some opportunities to fly my DJI Mavic up there that I brought along just in case.

Brian, I am glad you like the pictures. For the tables, see attached slide 2. I picked out some of the more interesting points, including the max CO2 and max alt. I also chose not to have the tables in the insert view, it got too cluttered and I don't think labels there are needed. What do you think?

Ved, are you ok using this flight on slide 4, or do you have a different flight you prefer for Redford? Let me know and I'll start working on a similar looking slide 4.

Ha de gött,

Jonas

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On Jun 6, 2017, at 9:40 AM, Gullett, Brian <[Gullett.Brian@epa.gov](mailto:Gullett.Brian@epa.gov)> wrote:

Jonas,

The early Radford figure was probably done by Ved using his GPS data. But he never had the CO2 data.

Your new slide 4 is Johanna's GPS and CO2 data. This slide is fine if Ved is okay with it -- I'm not sure he was "cleared" to go over the river. If he's okay with it, can you please add a table similar to that on slide 3 but which also includes the color scale for CO2? If he's not okay with it, please send a date and time of a flight that we can create a figure out of and Johanna will send you her GPS and CO2 data.

Slide 2 at McAlester is good to go also if you can add the table.

These figures will look great -- they greatly enhance the presentation!

The journal paper has been submitted but I will switch the figures out as soon as you get them to me. I should have them by June 16 to incorporate them in a Korea presentation at the end of the month. Is that doable?

Thanks, and hope you're having fun in Viking land.

Brian

**From:** Jonsson, Jonas (ARC-TI)[SGT, INC] [<mailto:jonas.jonsson@nasa.gov>]  
**Sent:** Saturday, May 27, 2017 8:54 AM  
**To:** Gullett, Brian <[Gullett.Brian@epa.gov](mailto:Gullett.Brian@epa.gov)>  
**Cc:** Aurell, Johanna <[Aurell.Johanna@epa.gov](mailto:Aurell.Johanna@epa.gov)>; Chirayath, Ved (ARC-SGE) <[ved.chirayath@nasa.gov](mailto:ved.chirayath@nasa.gov)>  
**Subject:** Re: Radford and McAlester figures

Hi Brian,

I've processed the data and attached an updated ppt with the track for Radford burns 1 & 2, which seems to not be the same flights as I plotted earlier (slide #3).

Attached are also KMZ files for the flights (one flight track with the CO2, and one ground trace). I also included the flight trace for Radford Burn #3, but that one looks a bit suspicious. It seems like the GPS data cut out at some locations and that the multi-rotor went off range for quite a bit, or is there something funky with the instrument GPS?

Hope this helps. If you have data for any other flights you'd like to see I'd be happy to help plot it upon my return.

Ha de gött,

Jonas

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On May 25, 2017, at 7:26 AM, Gullett, Brian <[Gullett.Brian@epa.gov](mailto:Gullett.Brian@epa.gov)> wrote:

Thanks, Johanna. I hope Jonas can use this to create those two figures before he goes to the North Pole!

Brian

**From:** Aurell, Johanna  
**Sent:** Thursday, May 25, 2017 10:24 AM  
**To:** Gullett, Brian <[Gullett.Brian@epa.gov](mailto:Gullett.Brian@epa.gov)>  
**Cc:** Jonsson, Jonas (ARC-TI)[Millennium Engineering & Integration Co.] <[jonas.jonsson@nasa.gov](mailto:jonas.jonsson@nasa.gov)>  
**Subject:** RE: Radford and McAlester figures

All,

I have attached the McAlester data from Feb 13, which is the same data I sent before. I also attached an updated version of the Radford October 6 data, it now includes altitude, latitude and altitude from the Kolibri.

Johanna

**From:** Gullett, Brian  
**Sent:** Thursday, May 25, 2017 9:22 AM  
**To:** Aurell, Johanna <[Aurell.Johanna@epa.gov](mailto:Aurell.Johanna@epa.gov)>  
**Cc:** Jonsson, Jonas (ARC-TI)[Millennium Engineering & Integration Co.] <[jonas.jonsson@nasa.gov](mailto:jonas.jonsson@nasa.gov)>  
**Subject:** Radford and McAlester figures

Johanna,

At this point I'm too confused about who is using what file to be certain. So, perhaps you can find the Kolibri's GPS, altitude, time, and CO2 data, send it to Jonas and he can start from the beginning on these two figures? These figures are important – I think without the CO2 color trace the paper is diminished.

I've attached the GPS data from Radford, October 6 to your Radford/Flight Figure folder. This NASA file DJIFlightRecord\_2016-10-06\_[09-47-44].csv has "09-47-44" in the filename. I don't know if this is a time, or what. The file increments time from 0 at 10 hz. I don't see altitude in this file.

Similarly in your McAlester folder find the file DJIFlightRecord\_2017-02-13\_[09-31-51].csv.

If you can't figure out which data file matches up, please email Jonas so that it doesn't cost any more time.

Thank you!

Brian

<Kolibri Matrice Flight Paths v4.pptx>